

**Atlas Minerals**  
**Division of Atlas Corporation**  
P.O. Box 1207 Moab, Utah 84532

*checked dates +  
surety amounts against  
notices + found them  
to be correct.  
4/11/77 TLG*

April 5, 1977

Mr. Ronald W. Daniels  
Coordinator of Mined Land Development  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Dear Mr. Daniels:

Enclosed are the Surety Agreements for the following mines:

|               |    |             |
|---------------|----|-------------|
| Probe         | -- | ACT/015/011 |
| Locust-Spider | -- | ACT/037/008 |
| Windfall      | -- | ACT/037/010 |
| Pandora       | -- | ACT/037/012 |

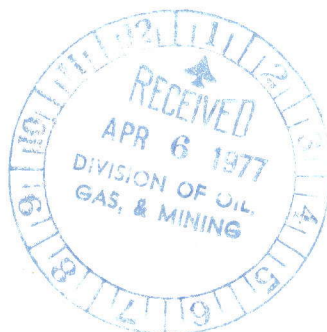
Yours very truly,



Thomas L. Wilson  
Manager of Mines

TLW/sh

Enclosures



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
BOARD OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116



\* MINED LANDS RECLAMATION CONTRACT \*

THIS CONTRACT, made and entered into this 22nd day of March, 19 77, between ATLAS CORPORATION a corporation duly authorized and existing under and by virtue of the laws of DELAWARE as party of the first part, and hereinafter called the Operator, and the Board of Oil, Gas, and Mining, duly authorized and existing by virtue of the laws of the State of Utah, as party of the second part hereinafter called the Board.

WITNESSETH:

WHEREAS, the Operator is the owner and in possession of certain mining claims and/or leases hereinafter more particularly mentioned and described in Exhibit "A" attached hereto.

WHEREAS, the Operator did on the 2nd day of MARCH 19 77, file with the Division of Oil, Gas, and Mining, a "Notice of Intention to Commence Mining Operations" and a "Mining and Reclamation Plan" to secure authorization to engage, or continue to engage, in mining operations in the State of Utah, under the terms and provisions of the Mined Land Reclamation Act, Section 40-8, UCA, 1953;

WHEREAS, the Operator is able and willing to reclaim the above mentioned "lands affected" in accordance with the approved mining and reclamation plan, the Mined Land Reclamation Act and the rules and regulations adopted in accordance therewith.

WHEREAS, the Board has considered the factual information and recommendations provided by the staff by the Division of Oil, Gas, and Mining as to the magnitude, type and costs of the approved reclamation activities planned for the land affected.

WHEREAS, the Board is cognizant of the nature, extent, duration of operations, the financial status of the Operator and his capabilities of carrying out the planned work.

NOW THEREFORE, for and in consideration of the mutual covenants of the parties by each to the other made and herein contained, the parties hereto agree as follows:

1. The Operator promises to reclaim the land affected in accordance with the approved Mining and Reclamation Plan, the Mined Land Reclamation Act, and the Rules and Regulations adopted in accordance therewith.
2. The Board, in lieu of the posting of a bond or other surety, accepts the personal guarantee of the Operator to reclaim the land affected.
3. The Board and Operator both agree that the Operator will not be obligated to expend a sum in excess of that required to complete the reclamation work outlined in the Mining and Reclamation Plan which was designed for the mining operation as submitted to the Division on the 2nd day of March, 1977, and which has been estimated to cost \$ 12,640.00.

IN WITNESS WHEREOF, the parties of the first and second parts hereto have respectively set their hands and seals this 22nd day of March, 19 77.

By: A. E. Dearth  
A.E. Dearth  
Vice President

ATTEST:  
[Signature]  
Assistant Secretary

BOARD OF OIL, GAS, AND MINING

By: Ray H. Gordon  
Chairman

Note: If the Operator is a corporation, the agreement should be executed by its duly authorized officer with the seal of the corporation affixed.

EXHIBIT A

MINING APPLICATION

No. \_\_\_\_\_

Date \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS  
(See Rule M of General Rules and Regulations)

1. Name of Applicant or Company Atlas Minerals Division of Atlas Corporation  
Corporation (☒) Partnership ( ) Individual ( )
2. Address Big Indian Mines Moab, Utah 84532  
Permanent Temporary
3. Name and title of person representing company T.L. Wilson, Manager of Mines
4. Address Moab, Utah 84532 Office Phone 686-2217
5. Location of Operation Emery Sec. 14 T. 21S R. 14E  
County
6. Name of Mine Probe Mine
7. Mineral to be mined: Mining method:  

|  |   |                                 |
|--|---|---------------------------------|
| <input type="checkbox"/> Coal                  | <input type="checkbox"/> Flagstone            | <u>Underground</u>              |
| <input type="checkbox"/> Copper                | <input type="checkbox"/> Gravel               |                                 |
| <input type="checkbox"/> Manganese             | <input type="checkbox"/> Shale                | <u>Modified Room and Pillar</u> |
| <input type="checkbox"/> Iron Ore              | <input checked="" type="checkbox"/> Uranium   |                                 |
| <input type="checkbox"/> Phosphate             | <input type="checkbox"/> Gilsonite            |                                 |
| <input type="checkbox"/> Potash                | <input type="checkbox"/> Bituminous Sandstone |                                 |
| <input type="checkbox"/> Fluorspar             | <input type="checkbox"/> Tungsten             |                                 |
| <input type="checkbox"/> Other (specify) _____ |   |                                 |
8. Have you or any person, partnership or corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?  

( ) Yes ( ) No

 If yes, list all approval numbers now under surety:  
#ACT - 037 - 003 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
9. Owner/Owners of record of the surface area within the land to be affected:  

|                      |               |
|----------------------|---------------|
| <u>Public Domain</u> | Address _____ |
| _____                | Address _____ |
| _____                | Address _____ |
| _____                | Address _____ |

10. Owner/Owners of record of minerals to be mined:

|                       |         |                     |
|-----------------------|---------|---------------------|
| <u>Atlas Minerals</u> | Address | <u>Moab, Utah</u>   |
| <u>C.H. Snow</u>      | Address | <u>Ferron, Utah</u> |
|                       | Address |                     |
|                       | Address |                     |

11. Owner/Owners of record of all other minerals within any part of the land affected:

|                       |         |                     |
|-----------------------|---------|---------------------|
| <u>Atlas Minerals</u> | Address | <u>Moab, Utah</u>   |
| <u>C.H. Snow</u>      | Address | <u>Ferron, Utah</u> |
|                       | Address |                     |

11a. Have the above owners been notified in writing?  
(X) Yes ( ) No

12. Source of Operator's legal right to enter and conduct operations on land to be covered by the Notice Ownership or lease of mining claims

13. Approximate acreage to be disturbed:

|  |                       |       |
|--|-----------------------|-------|
| A) Mining Operation Area -                     | <u>8.6</u>            | acres |
| (include operations, storage, & disposal area) |                       |       |
| B) Access Road or Haulage way -                | <u>0.3</u>            | acres |
| C) Drainage System -                           | <u>Included in</u>    | acres |
|  | <u>operation area</u> |       |
| TOTAL ACRES:                                   | <u>8.9</u>            |       |

14. Give the names and post office addresses of every principal Executive, Officer, Partner, (or person performing a similar function) of Applicant:

| Name:                 | Title:           | Address:                             |
|-----------------------|------------------|--------------------------------------|
| a. <u>A.E. Dearth</u> | <u>President</u> | <u>Atlas Minerals</u>                |
| b. _____              |                  | <u>Division of Atlas Corporation</u> |
|                       |                  | <u>2506 Prudential Plaza</u>         |
| c. _____              |                  | <u>1050 17th Street</u>              |
|                       |                  | <u>Denver, Colorado 80202</u>        |
| d. _____              |                  |                                      |

15. Has Applicant, any subsidiary or affiliate or any person, partnership, association, trust, or corporation controlled by or under common control with Applicant, or any person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? ( ) Yes (X) No

If yes, explain:

STATE OF UTAH

COUNTY OF GRAND

I, THOMAS L. WILSON, having been duly sworn  
depose and attest that all of the representations contained in the foregoing  
application are true to the best of my knowledge; that I am authorized to  
complete and file this application on behalf of the Applicant and this  
application has been executed as required by law.

Signed: Thomas L. Wilson

Taken, subscribed and sworn to before me the undersigned authority  
in my said county, this 2<sup>ND</sup> day of MARCH, 19 77.

Notary Public: Lee J. Stock

My Commission Expires: 11-2-77

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as  
follows:

"Information relating to the location, size, or nature  
of the deposit and marked confidential by the operator,  
shall be protected as confidential information by the  
Board and the Division and not be a matter of public  
record in the absence of a written release from the  
operator, or until the mining operation has been  
terminated as provided in subsection (2) of section  
40-8-21."

Is confidential information contained herein?

YES OK (Initial)

NO \_\_\_\_\_ (Initial)

Sections desired to be maintained as confidential information -

MAPS SHOWING ORE RESERVES OF MINE WORKINGS  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN

(Other forms may be used in lieu of MR 2, provided  
they contain the same information)

1. Name of Applicant or Company Atlas Minerals, Division of Atlas Corporation
2. Proposed type of operation Underground Uranium Mine
3. (a) Prior Land Use(s) Grazing  
(b) Current Land Use(s) Mining, Grazing  
(c) Possible or Prospective Future Land Use(s) Grazing
4. What vegetation exists on the land proposed to be affected \_\_\_\_\_  
Shadscale, Indian Ricegrass  
(a) Types and Estimated Percent cover or density: Less than 5% cover
5. What is the pH range of soil before mining? 8.2 - 8.6 pH  
Name of Person or Agency and method of determining pH Brad Clark, Lamotte  
Colormetric
6. Site elevation above sea level 4400' ±
7. In case of coal, oil shale, and bituminous sandstone:  
Principal seam(s) and thickness(es) \_\_\_\_\_
8. Estimated duration of mining operations 15 years
9. Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (X) No  
Does the above material being moved have any other characteristics affecting revegetation? Nutrient Deficient
10. Will any underground workings or aquifers be encountered? (X) Yes ( ) No  
Describe Water bearing strata  
Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (X) No If yes, describe the quality of water being discharged. \_\_\_\_\_

11. Describe specifically a detailed procedure for: See Attachment A
- (a) The mining sequence
  - (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
  - (c) The procedure for site preparation including removing trees and brush.
  - (d) The method for removing and stockpiling topsoil or disturbed materials.
  - (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic materials.
  - (f) A procedure for final stabilization of disturbed materials.

#### GRADING AND REGRADING

Specifically describe: See Attachment B

- (a) Typical cross-section of regrading. See Attachment C
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

#### TESTING

1. Describe method for testing stability of reclamation fill material.

Observation of existing waste rock dump

Describe method for the testing of soil that is intended to support vegetation

Soil analysis; revegetation test plots

2. Describe any soil treatment employed as an aid to revegetation None

Planned at this time, may use successful treatment developed by test seeding.

3. Describe surface preparation of areas intended to support vegetation:

Regrade, round-off outside edges, reduce slope, and scarify compacted surfaces

#### REVEGETATION

1. Revegetation to be completed by:

- ☒ Operator
- ☐ Soil Conservation District
- ☐ Private Contractor
- ☐ Other (specify) \_\_\_\_\_

- ☐ Hydroseeding
- ☐ Aerial Seeding
- ☐ Conventional or Rangeland Drill
- ☒ Broadcast and Drag
- ☒ Other Broadcast and drag cover



2. Will Mulch be used? ( ) Yes (X) No

Type: \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.

3. Revegetation Plan and Schedule -

| Species            | Rate/<br>Acre | Planting<br>Location | Facing<br>N-S-E-W | Season<br>to be replanted |
|--------------------|---------------|----------------------|-------------------|---------------------------|
| Indian Rice Grass  | 1 #/ac        | All sites            | All               | Preferably Fall           |
| Four Wing Saltbush | 1 #/ac        | " "                  | "                 | " "                       |
| Sand Propseed      | 1 #/ac        | " "                  | "                 | " "                       |
| Crested Wheatgrass | 2 #/ac        | Near drainage        | "                 | " "                       |
|                    |               |                      |                   |                           |

4. Will affected area be subject to livestock or wildlife grazing?

(X) Yes ( ) No Will vegetation protection be needed? \_\_\_\_\_

If grazing control cannot be accomplished, protection may be employed  
\_\_\_\_\_  
\_\_\_\_\_

5. Will irrigation be used: ( ) Yes (X) No Type \_\_\_\_\_

6. Describe maintenance procedures for revegetation if needed, until surety release is granted.

Monitoring and reseeding if necessary  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF UTAH

COUNTY OF GRAND

I, THOMAS L. WILSON, having been duly sworn  
depone and attest that all of the representations contained in the foregoing  
application are true to the best of my knowledge; that I am authorized to  
complete and file this application on behalf of the Applicant and this  
application has been executed as required by law.

Signed: *Thomas L. Wilson*

Taken, subscribed and sworn to before me the undersigned authority  
in my said county, this 2<sup>ND</sup> day of MARCH, 19 77.

Notary Public: *Don Stork*

My Commission Expires: ~~2-1-77~~ 11-2-77

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as  
follows:

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Board and the Division and not be a matter of public  
record in the absence of a written release from the  
operator, or until the mining operation has been  
terminated as provided in subsection (2) of section  
40-8-21."

Is confidential information contained herein?

YES *OK* (Initial)

NO \_\_\_\_\_ (Initial)

Sections desired to be maintained as confidential information -

MAPS SHOWING ORE RESERVES OR MINE WORKINGS

\_\_\_\_\_  
\_\_\_\_\_

## Attachment A

### Mining

Atlas Minerals proposes to construct a shaft mine for the purpose of extracting uranium ore from the Saltwash sandstone member in the Morrison formation. Mining would be conducted in a safe, orderly, and minerlike fashion.

A 12 foot by 6 foot mine shaft would be sunk 800 feet to the ore horizon. From this shaft a parallel drift system would be driven to ore reserves principally located south of the proposed shaft site. Three bore holes would be necessary to provide adequate ventilation and emergency escapeways.

Surface disturbance will be limited to an access road, building and shaft sites, ore pads, low grade and waste rock stockpiles, and a drainage system. Building sites, the shaft site, and the access road, would be prepared with fill material and grading. An ore pad would be used to stockpile ore until it could be transported to Moab, Utah for milling. Most of the material used to prepare the base of the ore pad and a portion of the low grade stockpile would be ultimately removed from the site for milling. Waste rock produced by the mining operation would be contained on the waste rock stockpile area (See disturbed surface area map).

Due to the characteristics of the existing Mancos shale surface material, none of this material would be removed for stockpiling and respreading. The existing vegetation would not be salvaged for revegetation purposes.

There are no natural water bodies in the immediate area; a ephemeral drainage crosses and another skirts the proposed mining site. The drainage through the site would be diverted to the adjacent drainage with an earthen berm while drainages traversed by the access road would be culverted to reduce interference with intermittent surface run-off.

Since mining would penetrate water bearing strata, some water will be periodically pumped to the surface from the underground workings. At the surface, the water would be contained and diverted to a proposed treatment facility approximately 8000 feet south of the planned shaft site and treated for suspended solids and Radium 226. Because this treatment facility would be jointly used by the Snow mine, also controlled by Atlas Minerals, a reclamation plan for this treatment and diversion system would be addressed in the reclamation plan for the Snow Mine.

## Attachment B

### Reclamation

Upon final abandonment of the mine: extraneous debris, scrap metal, discarded wood, and unusable buildings will be buried or removed from the site. The shaft and ventilation bore holes will be sealed to prevent unauthorized or accidental entry.

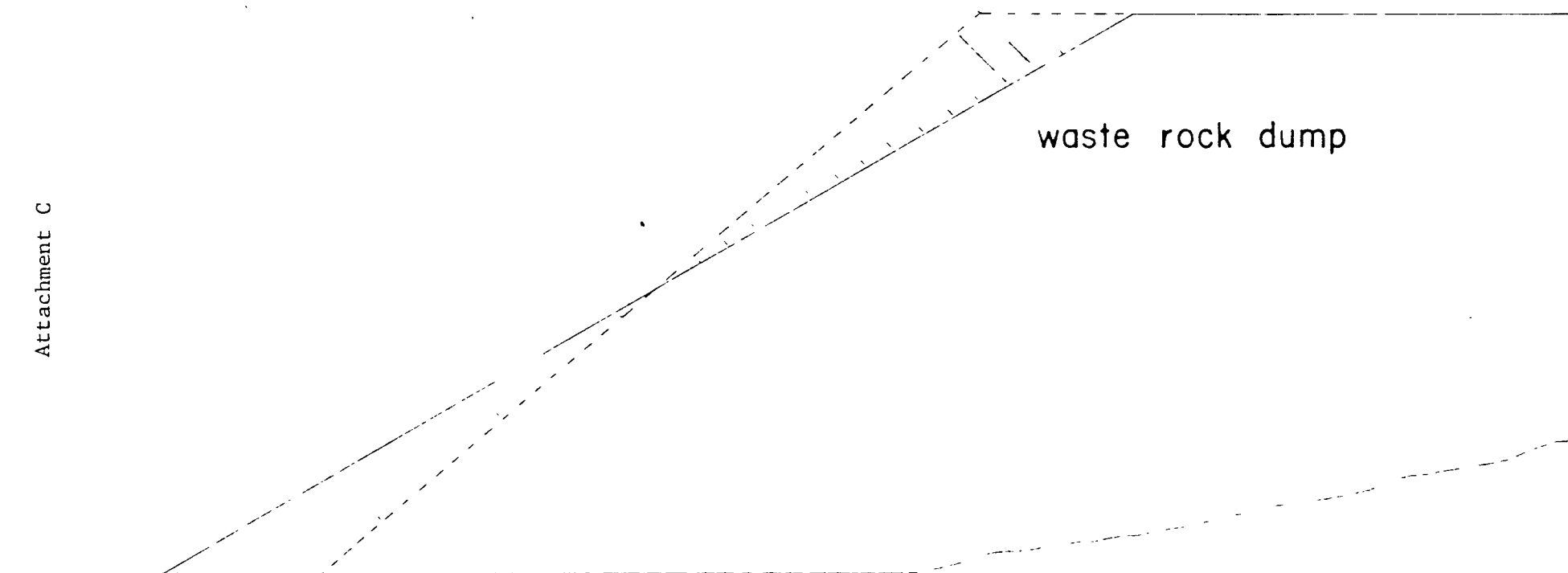
Waste rock and remaining low grade stockpiles would be stabilized by: rounding outside edges, reducing slopes of faces and regrading drainage contours on the top flat surfaces. Ore pads, building sites, and the access road would be regraded to reestablish ephemeral drainage patterns. The diversion berm and any culverts installed would be removed during grading. All compacted surfaces will be scarified prior to seeding. The entire site will be broadcast seeded with the specified mixture and drag covered.

At this time, there are no plans to use special revegetation methods. However, in the event revegetation tests indicate special soil preparation significant in establishing vegetation; then successful soil amendment and surface manipulation would be employed.

TYPICAL  
CROSS SECTION OF  
REGRADED AREA  
no scale

Attachment C

waste rock dump



DIVISION OF OIL, GAS, AND MINING  
BOND ESTIMATE

OPERATOR: ATLAS MINERALS, DIVISION OF ATLAS CORPORATION  
MINE NAME: Probe Mine  
LOCATION: Section 14, Township 21 South, Range 14 East  
COUNTY: Emery County, Utah  
DATE: March 21, 1977

| Operation                   |   | Amount                                       | Rate                        | Cost                  |
|-----------------------------|---|--|-----------------------------|-----------------------|
| A. CLEAN-UP                 | 1. Removal of structures & equipment.                                       | 60 man hrs                                   | \$ 8./hr                    | \$ 480.               |
|                             | 2. Removal of trash & debris.   | 10 loader hrs                                | 25./hr                      | 250.                  |
|                             | 3. Leveling of ancillary facilities pads and access roads.                  | 20 truck hrs                                 | 15./hr                      | 300.                  |
|                             |   |  |                             |                       |
| B. REGRADING & RECONTOURING | 1. Earthwork including haulage and grading of spoils, waste and overburden. | bulldozer<br>30 hours                        | 50./hr                      | 1,500.                |
|                             | 2. Recontouring of diversion and excavations.                               | bulldozer<br>4 hours                         | 50./hr                      | 200.                  |
|                             | 3. Spreading of soil or surficial materials.                                | ---  | --                          | --                    |
|                             |   |  |                             |                       |
| C. STABILIZATION            | 1. Soil preparation, scarification, fertilization, etc.                     | 9 acres                                      | 50./hr.                     | 450.                  |
|                             | 2. Seeding or planting.   | ---  | --                          | --                    |
|                             | 3. Construction of terraces, water-bars, etc.                               | ---  | --                          | --                    |
|                             |   |  |                             |                       |
| D. LABOR                    | 1. Supervision.   | 15 man hrs                                   | 10./hr                      | 150.                  |
|                             | 2. Labor exclusive of bulldozer time.                                       | ---  | --                          | --                    |
|                             |   |  |                             |                       |
| E. SAFETY                   | 1. Erection of fences, portal coverings, etc.                               | 1 shaft cover<br>1 vent plug<br>2,500' fence | 700./ea<br>50./ea<br>.80/ft | 700.<br>50.<br>2,000. |
|                             | 2. Removal or neutralization of explosive or hazardous materials.           | ---  | --                          | --                    |
|                             |   |  |                             |                       |
|                             |   |  |                             | 6,080                 |
| F. MONITORING               | 1. Continuing or periodic monitoring, sampling & testing deemed necessary.  | ---  | --                          | --                    |
|                             |   |  |                             |                       |
| G. OTHER                    | 1. Inflation  | 15 years                                     | @ 5%                        | 6,560.                |
|                             |   |  |                             |                       |
|                             |   |  |                             | SUBTOTAL              |

\$12,640. \*\* TOTAL